FIRST QUARTER 2010
DOMESTIC WELL MONITORING REPORT

YERINGTON MINE SITE

June 2, 2010

PREPARED FOR:

Atlantic Richfield Company

4 CENTERPOINTE DRIVE

LA PALMA, CALIFORNIA 90623

PREPARED BY:

Brown AND Caldwell

3264 Goni Rd, Suite 153
Carson City, Nevada 89706
(775) 883-4118

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES
(Compact Disc)

LIST OF ACRONYMS AND ABREVIATIONS

APN	Assessor's Parcel Number
ARC	Atlantic Richfield Company
COC	Chain-of-Custody
DWMP	Domestic Well Monitoring Plan
DWMR	Domestic Well Monitoring Report
EPA	U.S. Environmental Protection Agency
ESI	Environmental Standards, Inc.
GMR	Groundwater Monitoring Report
GPS	Global Positioning System
ICP	Inductively Coupled Plasma
ICP-MS	Inductively Coupled Plasma-Mass Spectrometry
MCL	Maximum Contaminant Levels
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
NDWR	Nevada Division of Water Resources
PDF	Portable Document Format
PQL	Practical Quantitation Limit
PWS	Pumpback Well System
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
RI/FS	Remedial Investigation/Feasibility Study
RPM	Remedial Project Manager
SOP	Standard Operating Procedures
SOW	Scope of Work
TDS	Total Dissolved Solids
TOC	Total Organic Carbon
UAO	Unilateral Administrative Order

amsl	above mean sea level
bgs	below ground surface
L	liter
mg	milligrams
pCi	picocuries
s.u.	standard units for pH
µg	micrograms
%	percent

SECTION 1.0
INTRODUCTION

Atlantic Richfield Company (ARC) has prepared this First Quarter 2010 Domestic Well Monitoring Report (1Q 2010 DWMR) pursuant to Section 6.0 of the Scope of Work (SOW), which was attached to the Administrative Order (Order) for Remedial Investigation and Feasibility Study (RI/FS) of the Anaconda/Yerington Mine Site (Site), issued to ARC by the U.S. Environmental Protection Agency - Region 9 (EPA) on January 12, 2009 (EPA, 2007). This DWMR presents laboratory analytical results for domestic, commercial, and irrigation water supply wells (hereinafter referred to as domestic wells) located near the Site. The Site is located adjacent to the City of Yerington, in western Nevada (Figure 1-1).

As a result of the EPA-approved one-year shutdown of the pumpback well system (PWS) in March 2009 to evaluate hydrogeologic conditions in the area of the PWS, EPA requested that ARC sample additional domestic wells on a quarterly basis along Luzier Lane and Locust Drive, located immediately north and west of the Site, respectively. In response, ARC sampled these selected additional domestic wells beginning with the second quarter (June) 2009 event and continuing on a quarterly basis (September and November) through the rest of 2009. Subsequently, in a letter dated November 9, 2009, EPA requested that ARC expand the domestic well monitoring program in the first quarter of 2010 (1Q 2010). The request was made pursuant to Paragraph 24 of the March 31, 2005 Unilateral Administrative Order (UAO), which states that ARC "shall provide EPA the QA/QC procedures followed by all sampling teams and laboratories performing data collection and analysis."

The expanded domestic well monitoring program requested by EPA in the November 9, 2009 letter (EPA, 2009) directed ARC to prepare an addendum to the Site-Wide Quality Assurance Project Plan (QAPP - Revision 5; Environmental Standards, Inc. [ESI] and Brown and Caldwell, 2009). EPA concluded that the number of wells being monitored, the frequency of monitoring, and the number of analytes are not adequate to evaluate trends and long-term impacts on public health. As indicated in the November 9, 2009 letter, ARC was to submit the QAPP addendum

and a list of domestic wells that ARC intended to sample to EPA by December 15, 2009. This list included domestic wells to be sampled on a quarterly or a semi-annual basis, based on the inclusion of the respective well owner in the Bottled Water Program (discussed in more detail in Section 3.0).

ARC prepared the *Draft Domestic Well Monitoring Plan* (DWMP) dated December 11, 2009 as an addendum to the QAPP, and submitted the DWMP to EPA (Brown and Caldwell, 2009). The DWMP included a list of domestic wells to be sampled, and specified the quality assurance/quality control (QA/QC) methods and associated standard operating procedures (SOPs) for domestic well sampling. Comments on the DWMP were provided to ARC by EPA on January 29 and February 4, 2010. In response to EPA comments, ARC submitted the *Domestic Well Monitoring Plan – Revision 1* to EPA on February 12, 2010 (Brown and Caldwell, 2010a). On March 17, 2010, ARC submitted the *Domestic Well Monitoring Plan – Revision 2* (Brown and Caldwell, 2010b), which incorporated comments on the: 1) *2009 Annual Domestic Well Monitoring Report* (Brown and Caldwell, 2010c) that were provided by EPA in a letter dated February 18, 2010 (EPA, 2010a); and 2) *Domestic Well Monitoring Plan – Revision 1* that were provided by EPA in a letter dated March 9, 2010 (EPA, 2010b).

Because of the expanded DWMP, ARC initiated the preparation of DWMRs as separate documents from the groundwater monitoring reports (GMRs), beginning with the 3Q 2009 sampling event. The rationale for separating the DWMRs from the GMRs included: 1) the different objectives for the two programs (the expanded domestic well monitoring program is intended as a public safety program, while the Site-wide groundwater monitoring program is intended to support the RI/FS); and 2) routinely, domestic well data will be available ahead of the monitor well data, which will allow for a more timely distribution of the water quality data to well owners/residents. This 1Q 2010 DWMR provides the following information:

- a description of the domestic well monitoring activities conducted during 1Q 2010;
- a summary of water quality analyses for the domestic wells sampled; and
- a discussion of the QA/QC aspects of the water quality data.

Section 2.0 presents a brief description of the current (1Q 2010) domestic well sampling network, including field sample collection and analytical methods. Section 3.0 presents 1Q 2010 water quality data for the domestic wells. Section 4.0 summarizes the QA/QC procedures applicable to this 1Q 2010 DWMR. Appendices A and B contain available domestic well construction logs and field log books, respectively. Copies of the 1Q 2010 domestic well field sampling forms are included in Appendix C. Appendix D contains 1Q 2010 analytical data tables, laboratory reports, verification reports, and the updated domestic well database including 1Q 2010 data. Individual domestic well data reports for EPA distribution to well owners or residents were submitted via e-mail to EPA's remedial project manager (RPM) on May 6, 2010, and are not included in this report. Appendix E consists of time-concentration plots of selected analytes for each domestic well sampled during the 1Q 2010 event, including some wells not sampled in 1Q 2010 but for which some historical data is available.

SECTION 2.0
1Q 2010 DOMESTIC WELL MONITORING PROGRAM

This section briefly describes the domestic well sampling program, and provides specific information on water sampling and analytical methods.

2.1 Domestic Well Network

In December 2003, ARC initiated collection of water samples for analysis from certain domestic wells as part of the on-going groundwater monitoring program. Samples were collected from these selected wells several times in 2004. Starting in June 2005, ARC initiated sampling of these selected wells on an annual basis. ARC sampled these "annual" wells during the second quarter of each subsequent year, including 2009.

In March 2009, EPA requested that some of the wells that were part of the annual program and other domestic wells north and northwest of the Site along Luzier Lane and Locust Drive be sampled for analysis on a quarterly basis. In response to EPA's request, ARC initiated sampling of the selected wells on a quarterly basis beginning with the 2Q 2009 event, concurrent with the wells that were to continue to be sampled on an annual basis. Furthermore, starting with the 2Q 2009 event, ARC sampled a domestic well only if a signed access agreement was in place with the well owner(s). Based on this criterion, 25 domestic wells were included in the quarterly sampling program through 4Q 2009, whereas 16 additional wells were to continue to be sampled on an annual basis starting in 2Q 2009, for a total of 41 wells that were sampled in 2009.

As part of the expanded DWMP to begin with the 1Q 2010 event, a total of 173 domestic wells were selected by ARC and EPA to be included in the program. Of these wells, residences that were participating in ARC's Bottled Water Program (discussed in more detail in Section 3.0) were to be sampled semi-annually (65 wells), whereas 107 wells were to be sampled quarterly. EPA requested that well DW-174 be included in the program, but the well does not have power (i.e., it is currently not used for domestic or agricultural purposes).

Table 2-1 summarizes the 173 domestic wells (including the 41 wells sampled from 2Q 2009 through 4Q 2009) that were included in the DWMP starting with the 1Q 2010 event, and includes some general information on construction details, if known. The locations of these domestic wells are shown in Figure 1-2 (also provided as a plate). Construction logs that are available for 71 of these domestic wells are provided in Appendix A.

Starting in the first week of February 2010, ARC sent access agreements via certified mail to the respective owner(s) of domestic wells for which signed access agreements were not in place, in preparation for the 1Q 2010 domestic well sampling event. During the last week of February 2010, ARC contacted by phone and personally visited several of the residences for which signed access agreements had yet to be returned. Up through the end of the 1Q 2010 sampling event, ARC continued to personally visit and/or contact by phone those residences who had yet to return the access agreement or respond to previous ARC contact.

Leading up to, and during, the 1Q 2010 event, ARC had obtained signed access agreements for 141 domestic wells. These 141 wells are indicated in Table 2-1 by a "Yes" indicated under the column "Access Agreement Signed". Of this total, samples were collected from 138 domestic wells during the 1Q 2010 event. Samples were not collected from three wells for which a signed access agreement was in place. These three wells and the reasons for not collecting samples are as follows:

- DW-48 (electrical cords in area of sampling point presented unsafe working conditions, owner was contacted numerous times to remove/temporarily move cords but either no answer or no response to phone messages left).
- DW-76 (owner moved out of state, house empty, no power to house).
- DW-168 (broken water pipes, owner hopes to have repaired by next sampling event).

As indicated in Table 2-1, by the end of the 1Q 2010 event, the status of the access agreements for the remaining 32 domestic wells were as follows:

- Access "denied" for nine well locations (DW-100, DW-131, DW-141, DW-145, DW-155, DW-156, DW-171, DW-172, and DW-174) as the owners were not interested in participation in the program. DW-174 does not have power and is not used for domestic or irrigation purposes.
- Access "pending" for two well locations (DW-99 and DW-165) as the owners indicated that a signed access agreement would be returned to ARC, but one had yet to be received by the end of the 1Q 2010 event.
- Access "outstanding" for the remaining 21 wells as the owners did not return a signed agreement and ARC was unable to contact them during follow-up phone calls and/or personal visits.

Information on the status of "pending" and "outstanding" access agreements after the end of 1Q 2010 (March 31, 2010) and before the submittal date of this report is not included in this report, but has been and will be periodically provided to the EPA, and also included in the 2Q 2010 report.

Tetra Tech EM Inc. (Tetra Tech), a contractor to the EPA, collected split-samples from 30 wells during the 1Q 2010 sampling event. The 30 wells from which split-samples were collected are indicated in Table 2-1 as bold, italicized well names.

During the 1Q 2010 sampling event, domestic well locations were surveyed using a Fast Static Global Positioning System (GPS) survey method referenced to a known Project Datum survey point using the Nevada State Plane West Zone coordinate system (NAD27). The GPS method was used to establish horizontal coordinates (X and Y). The GPS unit (a Trimble GeoXT handheld unit) is capable of achieving a horizontal accuracy of ± 3.0 feet (i.e., submeter). Vertical coordinates (Z) for each well were established by plotting the locations on a topographic map and estimating the ground surface elevation of the well location. A vertical accuracy of ± 0.5 feet is typically achieved using this method. The new, more accurate location coordinates are included in Table 2-1.

2.2 Domestic Well Sampling Methods

Water samples were collected from the domestic wells listed in Table 2-1 by the following methods:

1. Arrived at well location and notified the homeowner or occupant that well purging and sampling activities would occur. Homes were not entered.
2. In discussions with the homeowner or occupant, identified the "preferred sampling location" (if previously unknown), which was an outside spigot closest to the well, and did not draw water through a water softener tank, in-line filter, or other treatment system.
3. Filled out the Date, Well ID, Sampler Name, Analytes, and whether QA/QC sample would be collected on the **Domestic Well Field Sample Form**. Blank spaces were not left on the form.
4. Donned a new pair of nitrile gloves.
5. Went to the "preferred sample location" as identified on previous field sampling records or by the homeowner/occupant (if previously unknown). A spigot closest to the well (i.e., upstream of any treatment system) was used for purging and sampling so that only untreated water was sampled. However, an alternate spigot requested by the homeowner may have been used as long as it was upstream of and did not draw water through a water softener tank, in-line filter, or other treatment system. Recorded information (e.g., presence, type, location, etc.) on water treatment (if any) provided by the homeowner/occupant on the **Domestic Well Field Sample Form** and/or in the field logbook.
6. Removed the hose (if one attached) from the spigot. If necessary, the hose was left on the spigot for purging, but was removed before sampling.
7. Turned on the spigot.
8. Allowed water to run through the spigot for approximately five minutes or until approximately 25 gallons of water had been discharged. Collected discharged water into five-gallon buckets to verify that 25 gallons had been purged. Discarded the purge water onto the ground or onto landscaping in the general area of the well.
9. If left on during purging, removed the hose from the spigot.
10. Collected the samples by filling the required containers directly from the spigot. The valve on the spigot was turned almost to the closed position to provide a low sampling flow rate that was as laminar as possible. The lip of the sample containers did not touch the spigot. Sample bottles were filled in the following order at each well: physical parameters and cations/anions, total organic carbon (TOC), metals, and radiochemicals.
11. Turned off the spigot and re-attached the hose (if one was attached).

12. Completed the field documentation including field log book, the purge time and sample collection time on the **Domestic Well Field Sample Form**, chain-of-custody (COC) form, and sample labels.
13. Placed the sample containers for analysis of physical parameters and cations/anions, TOC, and metals in a cooler of ice until returned to the field office and prepared for shipment.
14. Filled out the information on the "Domestic Well Testing Program" flyer. If the homeowner/occupant was home, hand-delivered the flyer and discussed with the homeowner/occupant the information on the flyer. If the homeowner/occupant was not home, left the flyer securely taped on the front door.
15. Packed up the equipment and went to the next well.

The sampling procedure did not require use of equipment at multiple domestic well sampling locations. Consequently, there was no equipment that required decontamination between sampling locations. For the 1Q 2010 sampling event, a copy of the field log books is provided in Appendix B, whereas copies of field forms are included in Appendix C.

For QA/QC purposes, duplicate water samples were concurrently collected following the same sampling methods from 14 wells during the 1Q 2010 event. Duplicate samples were labeled with the suffix "-FD" appended to the well sample designation (i.e., DW-146-FD). Matrix spike/matrix spike duplicate (MS/MSD) samples were concurrently collected following the same sampling methods from seven wells, whereas a field blank was collected at seven well locations (seven samples total) by pouring certified analyte-free water provided by the respective laboratories into the appropriate sample containers.

Upon collection, each sample bottle was labeled and the samples for analysis of physical parameters and cations/anions, TOC, and metals were immediately placed into a cooler of ice. At the end of each work day, the samples collected that afternoon for analysis of physical parameters and cations/anions, TOC, and metals were transferred from the iced cooler into a refrigerator located in a secured-access building on the Site. Temperature blanks also were stored in the refrigerator, which contained a thermometer to document the refrigerator temperature. Late in the morning of the following work day, samples temporarily stored in the refrigerator from the previous work day afternoon were shipped in a cooler of ice, each

containing a temperature blank. The refrigerator temperature and the temperature of the blank placed into a cooler were documented on one of the COC forms that were placed into a cooler before shipment.

Samples were submitted under COC via overnight courier to the TestAmerica laboratory in Irvine, California for analysis of physical parameters and cations/anions, TOC, and metals, and to the TestAmerica laboratory in Richland, Washington for analysis of radiochemicals. The analytical laboratories provided the certified-clean sample bottles, chemical preservatives, shipping coolers, and custody seals. The TestAmerica laboratories analyzed the domestic well and QA/QC samples for the parameters listed in Table 2-2.

Table 2-1. 1Q 2010 Domestic Well Monitoring Locations and Construction Details

Well Name[1]	Access Agreement Signed[2]	Sampling Frequency[3]	Assessor's Parcel Number (APN)	Location Coordinates		NDWR[4] Well Log No.	Well Completion Date	Approx. Ground Surface Elevation	Well Casing Diameter	Total Depth of Well	Total Depth of Borehole	Top of Screen		Bottom of Screen Elevation	Screen Length	Top of Gravel Pack		Bottom of Gravel Pack		Gravel Pack Length	Hydro Zone[5]
				Easting	Northing			feet amsl[6]	inches	feet bgs[6]	feet	feet bgs	feet amsl	feet amsl	feet	feet bgs	feet amsl	feet bgs	feet amsl	feet	
DW-1	Yes	Quarterly	004-092-01	321479.89	1561774.73	92781	3/26/2004	4368.00	6.62	200	200	160	4208.00	4168.00	40	50	4318.00	200	4168.00	150	S/I/D
DW-2	Yes	Semi-annual	004-082-05	321915.42	1563663.39	20046	6/20/1979	4400.25	6.62	147	149	129	4271.25	4253.25	18	50	4350.25	149	4251.25	99	S/I
DW-3	Yes	Quarterly	014-271-13	322924.53	1564712.51	- -[7]	- -	4388.00	- -	- -	145	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-4	Yes	Semi-annual	004-091-07	321355.46	1562690.08	22350	1/15/1981	4390.25	6.62	144	145	124	4266.25	4246.25	20	50	4340.25	144	4246.25	94	S/I
DW-5	Yes	Semi-annual	004-082-01	322265.96	1563284.14	- -	- -	4384.50	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-6	Yes	Quarterly	014-271-09	323983.92	1564107.40	38309	6/27/1992	4362.50	6.62	150	150	130	4232.50	4212.50	20	60	4302.50	150	4212.50	90	I/D
DW-7	Yes	Semi-annual	014-271-04	322672.97	1564099.27	3794	6/1/1957	4389.00	6.62	110	110	60	4329.00	4279.00	50	- -	- -	- -	- -	- -	U
DW-9	Yes	Quarterly	014-271-16	322677.68	1564854.88	23009	6/19/1981	4394.25	6.62	120.5	121.5	100.5	4293.75	4273.75	20	50	4344.25	120.5	4273.75	70.5	S/I
DW-10	Yes	Semi-annual	014-271-05	322580.82	1564181.41	- -	- -	4392.50	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-11	Yes	Quarterly	014-271-38	322491.41	1565993.22	20064	6/20/1979	4402.75	6.62	115	115	95	4307.75	4287.75	20	- -	- -	- -	- -	- -	U
DW-12	Yes	Quarterly	014-251-15	322331.32	1569369.30	55089	3/1/1994	4359.50	6.62	140	140	120	4239.50	4219.50	20	- -	- -	- -	- -	- -	U
DW-13	Outstanding	Quarterly	004-083-01	323825.00	1563350.00	67351	6/20/1996	4358.00	6.62	139	139	119	4239.00	4219.00	20	50	4308.00	139	4219.00	89	S/I/D
DW-14	Yes	Semi-annual	004-081-08	321569.71	1562992.71	- -	- -	4391.75	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-15	Yes	Quarterly	014-411-14	318600.43	1554977.24	- -	- -	4458.25	- -	- -	155	135	4323.25	- -	- -	- -	- -	- -	- -	- -	U
DW-16	Yes	Semi-annual	004-082-02	321909.97	1563185.18	26691	10/21/1985	4390.00	6.62	142.5	143.5	122.5	4267.50	4247.50	20	50	4340.00	142.5	4247.50	92.5	S/I
DW-17	Outstanding	Quarterly	014-271-32	323830.97	1566321.97	9563	6/8/1967	4374.00	6.62	122.5	122.5	100	4274.00	4251.50	22.5	- -	- -	- -	- -	- -	U
DW-18	Yes	Quarterly	014-271-25	322609.37	1565542.57	- -	- -	4399.50	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-19	Yes	Semi-annual	014-271-35	323558.92	1566698.96	- -	- -	4369.50	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-20	Yes	Quarterly	004-071-05	321605.01	1566496.19	- -	- -	4452.25	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-21	Yes	Quarterly	014-271-64	323367.56	1566720.65	- -	- -	4373.00	- -	- -	160	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-22	Yes	Semi-annual	014-271-59	323599.95	1565659.32	47206	1/5/1995	4374.25	6.62	140	140	100	4274.25	4234.25	40	50	4324.25	140	4234.25	90	S/I/D
DW-23	Yes	Quarterly	014-271-31	323898.08	1565913.76	16514	10/5/1976	4368.50	6	- -	118	- -	- -	- -	- -	50	4318.50	118	4250.50	68	S/I
DW-24	Yes	Semi-annual	004-083-03	322897.56	1563338.80	46654	6/20/1994	4373.00	6.62	159	159	139	4234.00	4214.00	20	50	4323.00	159	4214.00	109	S/I/D
DW-25	Yes	Semi-annual	004-084-03	323214.50	1562810.01	36183	4/23/1991	4362.00	6.62	119.5	120.5	99.5	4262.50	4242.50	20	50	4312.00	119.5	4242.50	69.5	S/I
DW-26	Yes	Semi-annual	014-271-60	322690.10	1563462.10	71630	4/8/1998	4379.00	6	140	140	120	4259.00	4239.00	20	- -	- -	- -	- -	- -	U
DW-27	Yes	Semi-annual	004-082-04	321555.80	1563731.28	- -	- -	4410.50	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-28	Yes	Quarterly	014-271-76	322385.57	1565684.08	- -	- -	4406.50	- -	- -	120	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-29	Yes	Semi-annual	014-271-41	322310.23	1565229.25	- -	- -	4406.25	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-30	Yes	Quarterly	014-271-40	322375.44	1565303.10	- -	- -	4405.50	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-31	Yes	Quarterly	004-071-02	322323.86	1566227.93	64859	1/31/1997	4406.00	8.62/6.62	- -	220	135	4271.00	4226.00	45[8]	51	4355.00	155	4251.00	104	S/I
DW-32	Yes	Quarterly	004-091-02	322452.75	1562430.25	90560	8/19/2003	4368.25	6.62	177	177	137	4231.25	4191.25	40	50	4318.25	177	4191.25	127	S/I/D
DW-33	Outstanding	Quarterly	014-271-61	323150.00	1563500.00	71631	3/25/1998	4372.00	6	155	155	135	4237.00	4217.00	20	- -	- -	- -	- -	- -	U
DW-34	Yes	Semi-annual	014-271-44	321254.66	1565159.99	39522	7/3/1992	4436.00	6.62	183	183	163	4273.00	4253.00	20	50	4386.00	183	4253.00	133	S/I
DW-35	Yes	Quarterly	014-271-54	321617.10	1564383.24	- -	- -	4420.50	- -	- -	201	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-36	Yes	Semi-annual	004-081-10	322383.05	1562966.88	- -	- -	4377.00	- -	- -	180	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-37	Yes	Quarterly	014-271-02	322637.69	1562709.24	- -	- -	4368.75	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-38	Yes	Semi-annual	004-151-08	319368.72	1555111.65	27548	7/8/1986	4423.75	8.62	150	151	130	4293.75	4273.75	20	50	4373.75	150	4273.75	100	S/I
DW-39	Yes	Quarterly	004-151-03	319371.62	1556232.36	34158	8/24/1990	4400.75	6.62	155	155	135	4265.75	4245.75	20	- -	- -	- -	- -	- -	U

Table 2-1. 1Q 2010 Domestic Well Monitoring Locations and Construction Details

Well Name[1]	Access Agreement Signed[2]	Sampling Frequency[3]	Assessor's Parcel Number (APN)	Location Coordinates		NDWR[4] Well Log No.	Well Completion Date	Approx. Ground Surface Elevation	Well Casing Diameter	Total Depth of Well	Total Depth of Borehole	Top of Screen		Bottom of Screen Elevation	Screen Length	Top of Gravel Pack		Bottom of Gravel Pack		Gravel Pack Length	Hydro Zone[5]
				Easting	Northing			feet amsl[6]	inches	feet bgs[6]	feet	feet bgs	feet amsl	feet amsl	feet	feet bgs	feet amsl	feet bgs	feet amsl	feet	
DW-40	Yes	Quarterly	014-271-68	323305.70	1564426.57	59260	9/29/1996	4376.25	6.62	140	140	130	4246.25	4236.25	10	50	4326.25	140	4236.25	90	S/I
DW-41	Yes	Semi-annual	014-271-46	321780.85	1565073.38	- -	- -	4420.50	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-42	Yes	Quarterly	014-271-53	321260.90	1564359.92	28567	4/20/1987	4429.75	6.62	- -	160	- -	- -	- -	- -	50	4379.75	159	4270.75	109	S/I
DW-43	Yes	Semi-annual	014-241-12	327448.40	1562465.61	- -	- -	4350.00	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-44	Yes	Semi-annual	014-271-75	324112.19	1565160.53	- -	- -	4359.50	- -	- -	180	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-45	Yes	Semi-annual	004-084-04	323522.04	1563009.12	- -	- -	4359.75	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-46	Yes	Semi-annual	004-081-04	321223.59	1564046.98	- -	- -	4425.50	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-47	Yes	Quarterly	004-151-20	319426.10	1556683.72	9010	5/28/1966	4395.00	6.62	108	108	85	4310.00	4287.00	23	- -	- -	- -	- -	- -	U
DW-48	Yes	Semi-annual	014-271-28	324233.63	1565629.57	- -	- -	4360.50	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-49	Yes	Quarterly	004-153-08	319028.48	1553945.05	- -	- -	4461.50	- -	- -	152	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-50	Yes	Semi-annual	004-071-01	322230.93	1566583.81	- -	- -	4397.50	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-51	Yes	Quarterly	014-243-01	323345.42	1557457.68	- -	- -	4350.00	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-52	Outstanding	Quarterly	014-271-01	322756.00	1562124.00	26693	10/14/1985	4367.00	6.62	139	140	119	4248.00	4228.00	20	50	4317.00	139	4228.00	89	S/I/D
DW-53	Yes	Semi-annual	004-091-06	321741.43	1562589.82	- -	- -	4381.50	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-54	Yes	Semi-annual	014-242-07	320725.91	1557627.79	- -	- -	4352.75	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-55	Yes	Semi-annual	014-181-09	321999.25	1577722.88	- -	- -	4322.50	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-57	Yes	Semi-annual	014-251-12	321282.51	1570087.71	92770	3/1/2004	4369.50	6.62	- -	157	100	4269.50	4212.50	57[8]	50	4319.50	157	4212.50	107	S/I/D
DW-58	Yes	Semi-annual	014-291-15	330210.86	1565365.19	- -	- -	4346.25	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-59	Yes	Quarterly	014-431-04	330272.00	1546169.37	- -	- -	4383.50	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-60	Yes	Quarterly	014-231-40	329331.18	1576921.06	10083	5/28/1968	4330.00	6	80	83	60	4270.00	4250.00	20	- -	- -	- -	- -	- -	U
DW-61	Outstanding	Semi-annual	014-181-09	325125.00	1576200.00	- -	- -	4329.00	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-62	Yes	Semi-annual	004-081-09	321917.90	1563039.12	29346	10/12/1987	4386.50	6.62	147	148	127	4259.50	4239.50	20	- -	- -	- -	- -	- -	U
DW-63	Yes	Semi-annual	004-152-02	319017.64	1555396.76	25113	1/12/1984	4429.25	8.62	147.5	148.5	127.5	4301.75	4281.75	20	50	4379.25	147.5	4281.75	97.5	S/I
DW-64	Yes	Semi-annual	004-152-04	319020.36	1555743.83	- -	- -	4419.00	- -	- -	120	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-65	Yes	Quarterly	014-251-03	321630.48	1569349.95	- -	- -	4374.25	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-66	Yes	Quarterly	014-271-57	323068.10	1565585.55	39955	11/24/1992	4387.25	6.62	136	140	116	4271.25	4251.25	20	60	4327.25	136	4251.25	76	S/I
DW-67	Outstanding	Quarterly	014-271-58	323500.00	1565600.00	39638	9/20/1992	4376.00	6	150	150	130	4246.00	4226.00	20	50	4326.00	150	4226.00	100	S/I/D
DW-68	Outstanding	Quarterly	004-081-02	322100.00	1564025.00	- -	- -	4402.00	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-69	Yes	Semi-annual	014-181-09	323434.34	1575126.64	- -	- -	4327.75	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-70	Yes	Semi-annual	014-271-34	323947.81	1566144.70	- -	- -	4367.00	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-71	Yes	Quarterly	014-281-08	318838.82	1562045.44	91042	10/7/2003	4428.25	6.62	233	233	213	4215.25	4195.25	20	50	4378.25	200	4228.25	150	S/I
DW-72	Yes	Semi-annual	014-411-03	317537.05	1557045.57	42790	6/6/1993	4480.00	6.62	239	239	219	4261.00	4241.00	20	50	4430.00	239	4241.00	189	S/I
DW-73	Yes	Quarterly	014-411-22	317392.05	1554082.71	62472	10/12/1996	4546.75	6.62	260	260	200	4346.75	4286.75	60	50	4496.75	260	4286.75	210	S/I
DW-74	Yes	Quarterly	004-152-06	319040.50	1556117.50	- -	- -	4413.75	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-75	Yes	Semi-annual	004-151-04	319346.58	1555958.86	35936	3/28/1991	4404.00	6.62	160	160	140	4264.00	4244.00	20	- -	- -	- -	- -	- -	U
DW-76	Yes	Quarterly	004-153-10	319142.30	1554402.05	67353	3/5/1996	4452.00	6.62	199	199	159	4293.00	4253.00	40	50	4402.00	199	4253.00	149	S/I
DW-77	Yes	Semi-annual	004-153-13	318951.22	1554167.04	- -	- -	4456.75	- -	- -	240	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-78	Yes	Semi-annual	014-242-08	320448.09	1557621.18	- -	- -	4356.75	- -	- -	160	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-79	Yes	Semi-annual	014-231-42	329367.80	1577696.50	- -	- -	4328.00	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U

Table 2-1. 1Q 2010 Domestic Well Monitoring Locations and Construction Details

Well Name[1]	Access Agreement Signed[2]	Sampling Frequency[3]	Assessor's Parcel Number (APN)	Location Coordinates		NDWR[4] Well Log No.	Well Completion Date	Approx. Ground Surface Elevation	Well Casing Diameter	Total Depth of Well	Total Depth of Borehole	Top of Screen		Bottom of Screen Elevation	Screen Length	Top of Gravel Pack		Bottom of Gravel Pack		Gravel Pack Length	Hydro Zone[5]
				Easting	Northing			feet amsl[6]	inches	feet bgs[6]	feet	feet bgs	feet amsl	feet amsl	feet	feet bgs	feet amsl	feet bgs	feet amsl	feet	
DW-80	Outstanding	Semi-annual	014-181-09	323886.55	1574078.28	--	--	4330.00	--	--	--	--	--	--	--	--	--	--	--	--	U
DW-83	Outstanding	Quarterly	014-261-02	323875.00	1566800.00	--	--	4363.00	--	--	160	--	--	--	--	--	--	--	--	--	U
DW-85	Yes	Semi-annual	004-083-02	323240.50	1563393.61	--	--	4368.75	--	--	--	--	--	--	--	--	--	--	--	--	U
DW-86	Yes	Semi-annual	004-082-06	322243.06	1563638.41	--	--	4391.75	--	--	120	--	--	--	--	--	--	--	--	--	U
DW-87	Yes	Semi-annual	014-271-51	321282.85	1564834.80	--	--	4434.50	--	--	221	--	--	--	--	--	--	--	--	--	U
DW-88	Yes	Semi-annual	004-081-05	321236.69	1563780.38	14706	4/23/1975	4419.00	6.62	180	180	140	4279.00	4239.00	40	50	4369.00	180	4239.00	130	S/I/D
DW-89	Outstanding	Semi-annual	014-271-67	323361.70	1564457.09	43261	10/31/1993	4380.00	6.62	150	150	130	4250.00	4230.00	20	50	4330.00	150	4230.00	100	S/I/D
DW-90	Yes	Semi-annual	004-081-01	322249.38	1564025.45	--	--	4397.25	--	--	--	--	--	--	--	--	--	--	--	--	U
DW-91	Yes	Quarterly	004-151-21	319319.39	1556780.53	42088	3/5/1993	4398.75	6.62	159	159	139	4259.75	4239.75	20	50	4348.75	159	4239.75	109	S/I
DW-92	Yes	Quarterly	014-281-05	319272.93	1562734.68	81115	5/25/2000	4425.50	6.62	258	260	240	4185.50	4167.50	18	--	--	--	--	--	U
DW-93	Outstanding	Quarterly	014-271-22	323313.27	1565196.77	--	--	4387.00	--	--	--	--	--	--	--	--	--	--	--	--	U
DW-94	Yes	Semi-annual	014-271-19	323562.36	1564969.29	39810	9/24/1992	4371.50	6	160	160	140	4231.50	4211.50	20	50	4321.50	160	4211.50	110	S/I/D
DW-95	Yes	Quarterly	014-271-17	323182.63	1565006.98	--	--	4380.75	--	--	--	--	--	--	--	--	--	--	--	--	U
DW-96	Yes	Semi-annual	014-271-11	323910.35	1564584.83	--	--	4364.75	--	--	--	--	--	--	--	--	--	--	--	--	U
DW-97	Outstanding	Quarterly	014-271-49	322374.09	1564915.47	--	--	4410.00	--	--	116	--	--	--	--	--	--	--	--	--	U
DW-98	Yes	Quarterly	014-271-65	322944.95	1566523.47	42798	9/30/1993	4386.00	6	130	140	100	4286.00	4256.00	30	50	4336.00	140	4246.00	90	S/I
DW-99	Pending	Quarterly	014-261-05	323244.52	1567600.99	--	--	4364.00	--	104	104	45	4319.00	4260.00	59	--	--	--	--	--	U
DW-100	Denied	Quarterly	004-152-10	319232.25	1557260.20	--	--	4410.00	--	--	180	--	--	--	--	--	--	--	--	--	U
DW-101	Yes	Quarterly	014-411-08	317084.06	1555185.51	21005	4/10/1980	4518.25	8	230	250	210	4308.25	4288.25	20	--	--	--	--	--	U
DW-102	Yes	Quarterly	014-411-25	318411.87	1553053.16	--	--	4500.00	--	--	--	--	--	--	--	--	--	--	--	--	U
DW-103	Yes	Quarterly	014-271-77	322238.30	1565526.48	93614	6/4/2009	4410.00	6.62	160	160	140	4270.00	4250.00	20	50	4360.00	160	4250.00	110	S/I
DW-104	Yes	Quarterly	014-271-07	323198.82	1564327.13	--	--	4378.00	--	--	--	--	--	--	--	--	--	--	--	--	U
DW-105	Outstanding	Semi-annual	014-271-27	324025.00	1565600.00	--	--	4365.00	--	--	--	--	--	--	--	--	--	--	--	--	U
DW-106	Yes	Quarterly	014-271-08	323511.55	1564258.61	--	--	4369.75	--	--	--	--	--	--	--	--	--	--	--	--	U
DW-107	Yes	Quarterly	014-271-14	322563.96	1564557.48	22858	--	4396.25	6.6	115.5	116.5	75.5	4320.75	4280.75	40	50	4346.25	115.5	4280.75	65.5	S/I
DW-108	Yes	Semi-annual	014-291-03	330211.03	1566383.11	--	--	4344.00	--	--	--	--	--	--	--	--	--	--	--	--	U
DW-109	Yes	Quarterly	014-231-30	329789.41	1575127.66	85991	3/1/2002	4334.00	8.62	240	240	200	4134.00	4094.00	40	100	4234.00	240	4094.00	140	D
DW-110	Yes	Quarterly	014-271-18	323448.18	1564989.18	39811	9/29/1992	4374.50	6	160	160	140	4234.50	4214.50	20	50	4324.50	160	4214.50	110	S/I/D
DW-112	Yes	Semi-annual	004-081-03	321768.03	1564020.02	14403	10/18/1974	4410.25	--	199	200	169	4241.25	4211.25	30	--	--	--	--	--	U
DW-113	Yes	Quarterly	004-092-02	321669.70	1561854.46	95003	10/20/2004	4367.25	6.62	220	220	180	4187.25	4147.25	40	--	--	--	--	--	U
DW-114	Yes	Quarterly	014-251-13	321412.51	1569539.24	95002	9/25/2004	4377.50	6.62	170	170	150	4227.50	4207.50	20	51	4326.50	170	4207.50	119	S/I/D
DW-115	Outstanding	Quarterly	004-091-04	322406.92	1561998.27	24182	10/13/1982	4367.00	6.62	130.5	131.5	110.5	4256.50	4236.50	20	50	4317.00	130.5	4236.50	80.5	S/I/D
DW-116	Yes	Quarterly	004-151-23	319318.73	1557286.14	--	--	4393.50	--	--	--	--	--	--	--	--	--	--	--	--	U
DW-117	Yes	Semi-annual	014-291-13	329857.42	1565468.92	--	--	4345.25	--	--	--	--	--	--	--	--	--	--	--	--	U
DW-118	Yes	Quarterly	014-291-09	330207.60	1565939.61	18534	6/23/1978	4344.50	6.62	96	96	76	4268.50	4248.50	20	50	4294.50	96	4248.50	46	I
DW-119	Yes	Quarterly	014-291-05	330206.31	1566167.43	--	--	4344.00	--	--	--	--	--	--	--	--	--	--	--	--	U
DW-120	Yes	Quarterly	014-271-29	324544.66	1565878.27	--	--	4355.25	--	--	--	--	--	--	--	--	--	--	--	--	U
DW-121	Outstanding	Quarterly	014-231-05	330285.71	1575771.02	28962	6/28/1987	4334.00	8	122	130	102	4232.00	4212.00	20	--	--	--	--	--	U
DW-122	Yes	Quarterly	014-271-63	323569.72	1563461.39	58915	8/1/1996	4363.00	6.62	150	150	130	4233.00	4213.00	20	53	4310.00	150	4213.00	97	S/I/D

Table 2-1. 1Q 2010 Domestic Well Monitoring Locations and Construction Details

Well Name[1]	Access Agreement Signed[2]	Sampling Frequency[3]	Assessor's Parcel Number (APN)	Location Coordinates		NDWR[4] Well Log No.	Well Completion Date	Approx. Ground Surface Elevation	Well Casing Diameter	Total Depth of Well	Total Depth of Borehole	Top of Screen		Bottom of Screen Elevation	Screen Length	Top of Gravel Pack		Bottom of Gravel Pack		Gravel Pack Length	Hydro Zone[5]
				Easting	Northing			feet amsl[6]	inches	feet bgs[6]	feet	feet bgs	feet amsl	feet amsl	feet	feet bgs	feet amsl	feet bgs	feet amsl	feet	
DW-123	Yes	Semi-annual	014-411-27	319160.17	1553522.86	90771	4/12/2002	4467.00	6.62	220	220	180	4287.00	4247.00	40	50	4417.00	220	4247.00	170	S/I/D
DW-124	Yes	Quarterly	004-152-07	319197.37	1556358.35	- -	- -	4405.50	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-125	Yes	Semi-annual	004-153-02	319101.06	1552774.19	101145	6/23/2005	4481.50	6.62	- -	260	160	4321.50	4221.50	100[8]	90	4391.50	260	4221.50	170	S/I/D
DW-126	Yes	Quarterly	014-242-04	322254.51	1557846.41	101211	3/25/2006	4348.50	6.62	162	166	158	4190.50	4186.50	4	- -	- -	- -	- -	- -	U
DW-127	Outstanding	Semi-annual	014-411-01	317211.65	1557192.38	- -	- -	4511.00	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-128	Yes	Semi-annual	004-151-13	319341.96	1553989.62	99667	4/10/2006	4450.50	6.62	200	200	180	4270.50	4250.50	20	51	4399.50	200	4250.50	149	S/I
DW-129	Yes	Semi-annual	004-153-07	318924.48	1553809.68	- -	- -	4466.00	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-130	Yes	Semi-annual	014-251-24	321849.23	1570729.67	- -	- -	4344.25	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-131	Denied	Quarterly	014-242-05	321691.82	1557447.01	97805	7/17/2005	4357.00	6.62	180	180	160	4197.00	4177.00	20	55	4302.00	180	4177.00	125	S/I/D
DW-132[9]	Yes	Quarterly	004-152-01	319043.76	1555078.75			4435.25	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-133	Outstanding	Quarterly	014-261-04	323037.95	1566931.01	29002	9/5/1987	4380.00	8	118	126	100	4280.00	4262.00	18	- -	- -	- -	- -	- -	U
DW-134	Yes	Semi-annual	014-281-23	318604.63	1558831.00	- -	- -	4408.00	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-135	Yes	Semi-annual	014-281-21	318784.41	1559432.63	- -	- -	4389.00	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-136	Yes	Semi-annual	014-251-07	321532.01	1570111.58	- -	- -	4363.25	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-138	Yes	Quarterly	004-084-02	322884.89	1562882.64	26692	1/30/1986	4367.75	6.62	120	121	98.5	4269.25	4247.75	21.5	50	4317.75	120	4247.75	70	S/I
DW-139	Yes	Semi-annual	014-281-06	318914.81	1562194.73	- -	- -	4430.00	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-140	Yes	Quarterly	014-261-31	322741.44	1566966.15	- -	- -	4382.00	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-141	Denied	Quarterly	004-153-11	319122.84	1554520.68	- -	- -	4445.00	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-142	Yes	Quarterly	004-151-12	319312.84	1554250.41	- -	- -	4441.50	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-143	Yes	Quarterly	004-151-11	319325.96	1554375.73	101360	6/28/2006	4438.50	6.62	180	200	140	4298.50	4258.50	40	60	4378.50	200	4238.50	140	S/I
DW-144	Outstanding	Quarterly	004-151-10	319451.06	1554626.05	35169	1/21/1991	4430.00	6.62	150	150	130	4300.00	4280.00	20	50	4380.00	150	4280.00	100	S/I
DW-145	Denied	Quarterly	004-151-06	319319.57	1555428.81	- -	- -	4415.00	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-146	Yes	Quarterly	014-261-32	323246.96	1568041.53	- -	- -	4352.75	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-147	Yes	Quarterly	004-081-06	321305.96	1563407.36	- -	- -	4406.50	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-148	Yes	Quarterly	014-411-30	318538.58	1553812.84	- -	- -	4481.25	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-149	Yes	Quarterly	014-411-06	317549.32	1555872.76	24788	6/20/1983	4477.75	8.62	198	198	178	4299.75	4279.75	20	50	4427.75	197	4280.75	147	S/I
DW-150	Yes	Quarterly	014-281-02	320281.31	1560698.85	95007	7/21/2004	4359.50	6.62	236	236	230	4129.50	4123.50	6	50	4309.50	236	4123.50	186	I/D
DW-151	Yes	Quarterly	004-092-03	322341.62	1561675.70	39956	11/12/1992	4356.75	6.62	113	113	93	4263.75	4243.75	20	60	4296.75	113	4243.75	53	I
DW-152	Outstanding	Quarterly	004-091-01	322100.00	1562700.00	- -	- -	4377.00	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-153	Yes	Quarterly	004-082-03	321574.62	1563413.16	- -	- -	4402.25	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-154	Yes	Quarterly	014-271-62	323317.13	1563464.94	71629	3/10/1998	4368.00	6	150	150	130	4238.00	4218.00	20	- -	- -	- -	- -	- -	U
DW-155	Denied	Quarterly	014-271-55	322100.00	1564150.00	26690	7/10/1985	4403.00	6.62	147	148	123	4280.00	4256.00	24	50	4353.00	147	4256.00	97	S/I
DW-156	Denied	Quarterly	014-271-56	322200.00	1564150.00	- -	- -	4401.00	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-157	Outstanding	Quarterly	014-271-06	323100.00	1564300.00	20729	1/15/1980	4380.00	6.62	123.5	122	103.5	4276.50	4256.50	20	50	4330.00	123.5	4256.50	73.5	S/I
DW-158	Yes	Quarterly	014-271-52	321254.67	1564691.64	- -	- -	4435.25	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-159	Yes	Quarterly	014-271-50	322197.97	1564442.21	22091	10/20/1980	4405.75	6.62	148.5	148.5	128.5	4277.25	4257.25	20	50	4355.75	147.5	4258.25	97.5	S/I
DW-160	Outstanding	Quarterly	014-271-15	322750.00	1564700.00	- -	- -	4392.00	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-161	Yes	Quarterly	014-271-66	323839.01	1564540.50	67339	6/27/1995	4366.75	6.62	139	140	119	4247.75	4227.75	20	50	4316.75	139	4227.75	89	S/I/D
DW-162	Yes	Quarterly	014-271-47	321955.25	1564841.64	17992	4/24/1978	4413.75	6	146	146	126	4287.75	4267.75	20	50	4363.75	146	4267.75	96	S/I

Table 2-1. 1Q 2010 Domestic Well Monitoring Locations and Construction Details

Well Name[1]	Access Agreement Signed[2]	Sampling Frequency[3]	Assessor's Parcel Number (APN)	Location Coordinates		NDWR[4] Well Log No.	Well Completion Date	Approx. Ground Surface Elevation	Well Casing Diameter	Total Depth of Well	Total Depth of Borehole	Top of Screen		Bottom of Screen Elevation	Screen Length	Top of Gravel Pack		Bottom of Gravel Pack		Gravel Pack Length	Hydro Zone[5]
				Easting	Northing			feet amsl[6]	inches	feet bgs[6]	feet	feet bgs	feet amsl	feet amsl	feet	feet bgs	feet amsl	feet bgs	feet amsl	feet	
DW-163	Yes	Quarterly	014-271-45	321319.12	1565074.11	24544	4/14/1983	4432.75	6.62	169	170	149	4283.75	4263.75	20	50	4382.75	169	4263.75	119	S/I
DW-164	Yes	Quarterly	014-271-43	321667.15	1565205.09	- -	- -	4424.00	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-165	Pending	Quarterly	014-271-42	321950.00	1565400.00	21181	5/10/1980	4418.00	8	155	160	119	4299.00	4263.00	36	- -	- -	- -	- -	- -	U
DW-166	Yes	Quarterly	014-271-24	322850.00	1565375.00	58927	5/8/1996	4393.00	6.62	109	109	103	4290.00	4284.00	6	50	4343.00	109	4284.00	59	S/I
DW-167	Yes	Quarterly	014-271-23	322919.25	1565124.81	- -	- -	4388.25	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-168	Yes	Quarterly	014-271-21	323634.75	1565159.38	- -	- -	4369.25	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-169	Yes	Quarterly	014-261-31	322810.73	1567329.19	- -	- -	4371.75	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-170	Yes	Quarterly	014-261-06	323049.77	1567780.35	- -	- -	4361.50	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-171	Denied	Quarterly	014-261-30	322975.00	1568200.00	- -	- -	4352.00	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-172	Denied	Quarterly	014-261-29	322975.00	1568300.00	27757	9/19/1986	4352.00	6.62	99	100	79	4273.00	4253.00	20	50	4302.00	99	4253.00	49	S/I
DW-173	Yes	Quarterly	014-241-42	330224.08	1558835.49	- -	- -	4357.75	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-174[10]	Not Applicable	None	014-281-29	320301.69	1559457.08	- -	- -	4348.00	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
DW-175	Yes	Quarterly	014-231-38	329450.80	1576435.15	- -	- -	4332.50	- -	138	140	128	4204.50	4194.50	10	- -	- -	- -	- -	- -	U
TW-6	Yes	Quarterly	014-181-10	329059.58	1573402.02	- -	- -	4337.50	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
WDW017	Yes	Quarterly	014-242-09	319891.99	1557705.49	- -	- -	4371.00	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
WDW018	Yes	Semi-annual	014-242-06	320848.01	1557638.50	- -	- -	4351.75	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	U
WDW019[11]	Yes	Quarterly	014-401-20	327082.83	1557405.63	78925	1/19/2000	4354.50	30/16	365	365	50	4304.50	3989.50	315	2	4352.50	365	3989.50	363	S/I/D
Well 4	Yes	Semi-annual	014-181-09	321746.43	1572812.65	31222	1/11/1989	4341.00	8	- -	200	105	4236.00	4151.00	85[8]	- -	- -	- -	- -	- -	U

Notes:
(1) EPA collected split-samples during the 1Q2010 event from wells indicated by bold, italicized names.
(2) Status as of end of 1Q 2010 event (March 31, 2010): Yes = signed access agreement received and sample collected during 1Q 2010 event (except for DW-48, DW-76, and DW-168); Pending = owner verbally agreed to sign and submit access agreement; Outstanding = access agreement sent to owner but the signed agreement has not been returned and not able to contact owner for verbal verification; Denied = owner refused access.
(3) Sampling frequency based on bottled water program recipients.
(4) NDWR = Nevada Division of Water Resources.
(5) Zone designation based on gravel-pack interval. S = shallow; I = intermediate; D = deep; U = Unknown (i.e., either due to incomplete or non-existent NDWR Well Driller's Reports). Combinations used where long screen and/or sand-pack intervals span hydrostratigraphic zones.
(6) amsl = above mean sea level; bgs = below ground surface
(7) "- -" means information not available on the NDWR Well Driller's Report.
(8) Multiple screen intervals.
(9) DW-132 was formerly designated as DW-111.
(10) EPA requested inclusion of this well in the DWMP but the well does not have power and is not currently being used for domestic or agricultural purposes.
(11) Well WDW019 typically operates during the irrigation season (April through September). Sampling may only be possible during the second and third quarters, if the well is operating.

Table 2-2. Analyte List for Domestic Well Sampling					
Parameter or Analyte	**Total or Dissolved**	**Method [2]**	**Reporting Limit [2]**	**MCL[3]**	**Units**
Physical Parameters and Major Anions/Cations					
Alkalinity, Bicarbonate (as $CaCO_3$)	Total	SM 2320B	2.0	- -	mg/L
Alkalinity, Carbonate (as $CaCO_3$)	Total	SM 2320B	2.0	- -	mg/L
Alkalinity, Hydroxide (as $CaCO_3$)	Total	SM 2320B	2.0	- -	mg/L
Alkalinity, Total (as $CaCO_3$)	Total	SM 2320B	2.0	- -	mg/L
Chloride	Total	EPA 300.0	0.5	- -	mg/L
Fluoride	Total	EPA 300.0	0.5	4.0	mg/L
Nitrate (as N)	Total	EPA 300.0	0.1	10	mg/L
Nitrate (NO_3 + NO_2 as N)	Total	EPA 300.0	0.1	- -	mg/L
Nitrite (as N)	Total	EPA 300.0	0.1	1	mg/L
pH (Lab)	Total	SM 4500B	0.1	- -	s.u.
Sulfate	Total	EPA 300.0	0.5	- -	mg/L
Total Dissolved Solids (TDS)[1]	Total (Lab Filtered)[1]	SM 2540C	10	- -	mg/L
Total Organic Carbon (TOC)	Total	SM 5310B	1.0	- -	mg/L
Metals					
Aluminum	Total	EPA 200.7	0.05	- -	mg/L
Arsenic	Total	EPA 200.8	0.001	0.01	mg/L
Barium	Total	EPA 200.8	0.001	2.0	mg/L
Beryllium	Total	EPA 200.8	0.0005	0.004	mg/L
Boron	Total	EPA 200.7	0.05	- -	mg/L
Cadmium	Total	EPA 200.8	0.001	0.005	mg/L
Calcium	Total	EPA 200.7	0.1	- -	mg/L
Chromium	Total	EPA 200.8	0.002	0.1	mg/L
Cobalt	Total	EPA 200.8	0.001	- -	mg/L
Copper	Total	EPA 200.8	0.001	1.3	mg/L
Iron	Total	EPA 200.7	0.04	- -	mg/L
Lead	Total	EPA 200.8	0.001	0.015[4]	mg/L
Lithium	Total	EPA 200.7	0.002	- -	mg/L
Magnesium	Total	EPA 200.7	0.02	- -	mg/L
Manganese	Total	EPA 200.8	0.001	- -	mg/L
Molybdenum	Total	EPA 200.8	0.002	- -	mg/L
Nickel	Total	EPA 200.8	0.002	- -	mg/L
Potassium	Total	EPA 200.7	0.5	- -	mg/L
Selenium	Total	EPA 200.8	0.002	0.05	mg/L
Silicon	Total	EPA 200.7	0.05	- -	mg/L
Sodium	Total	EPA 200.7	0.5	- -	mg/L
Strontium	Total	EPA 200.7	0.02	- -	mg/L
Uranium, Total	Total	EPA 200.8	0.001	0.03	mg/L
Vanadium	Total	EPA 200.8	0.002	- -	mg/L
Zinc	Total	EPA 200.8	0.01	- -	mg/L

Table 2-2. Analyte List for Domestic Well Sampling					
Parameter or Analyte	**Total or Dissolved**	**Method (2)**	**Reporting Limit (2)**	**MCL(3)**	**Units**
Radiochemicals					
Gross Alpha	Total	EPA 900.0	1.0	15	pCi/L
Gross Beta	Total	EPA 900.0	1.0	- -	pCi/L
Radium-226	Total	EPA 903.0	1.0	5(5)	pCi/L
Radium-228	Total	EPA 904.0	1.0	5(5)	pCi/L

Notes: (1) The sample container for TDS is filtered in the analytical laboratory with a new disposable 0.45 micron filter.
(2) EPA laboratory analytical methods and reporting limits are consistent with those provided in Revision 5 of the QAPP; alternative analytical methods identified in the QAPP may also be used.
(3) EPA National Primary Drinking Water Maximum Contaminant Level (MCL); "- -" means no MCL.
(4) MCL set at zero; action level is 0.015 mg/L.
(5) MCL for combined Radium 226 + 228 is 5 pCi/L.
"s.u." is "standard units" for pH.
"mg/L" is "milligrams per liter".
"pCi/L" is "picocuries per liter".

SECTION 3.0
1Q 2010 DOMESTIC WELL SAMPLING RESULTS

During the 1Q 2010 sampling event, domestic well water samples were collected from a total of 138 domestic wells (58 semi-annual and 80 quarterly) (Table 2-1 and Figure 1-2). Samples were submitted to the TestAmerica laboratory in Irvine, California for analysis of physical parameters and cations/anions, TOC, and metals, and to the TestAmerica laboratory in Richland, Washington for analysis of radiochemicals, respectively, as listed in Table 2-2.

A table of the analytical results of domestic wells sampled during the 1Q 2010 event is included in Appendix D-1 (Excel format). Laboratory reports (pdf) are in Appendix D-2, verification reports (pdf) are in Appendix D-3, and the updated domestic well database including 1Q 2010 data (Access format) is in Appendix D-4. Individual domestic well data reports for EPA distribution to well owners or residents were submitted via e-mail to EPA's RPM on May 6, 2010, and are not included in this report. Appendix E consists of time-concentration plots (pdf) of six selected constituents (alkalinity, sulfate, chloride, total arsenic, total iron, and total uranium) for each domestic well sampled in the 1Q 2010 event. Although field parameters were not measured as part of the expanded DWMP in 1Q 2010, plots for pH are included for wells where measured in the field in the past. Also included in Appendix E are plots available for wells that were not sampled in 1Q 2010 or are part of the DWMP but for which historical data are available for at least one of the selected constituents. Because this is the initial report for the expanded DWMP, the plots for these additional wells may not be included in future quarterly reports, but will be included in future annual reports.

The time concentration plots in Appendix E indicate that most wells do not show consistent trends in concentrations and consist of a point, or a few widely spaced points, on the plots because: 1) some wells were sampled for the first time in 1Q 2010 since inclusion in the expanded DWMP; 2) a few wells for which limited historical data are available were not sampled in 1Q 2010 because a signed access agreement was not received; 3) some wells have not been sampled previously for parameters that were included for analysis starting with the

1Q 2010 event; and 4) the time elapsed between sampling of some wells has been significant enough (years) that trends cannot be reliably established. Therefore, additional data will need to be collected during upcoming quarterly and semi-annual sampling events to sufficiently evaluate potential overall trends in constituent concentrations for wells in the DWMP.

Diagrams illustrating the distribution of sulfate (which is an indicator of mine-impacted groundwater) and uranium (which is the basis for decisions on bottled water supply) concentrations in the domestic well samples are included as Figure 3-1 and Figure 3-2 (provided as plates), respectively. In reviewing the distribution of sulfate indicated on Figure 3-1, concentrations ranged from 16 milligrams per liter (mg/L) at DW-126 located just north of the Site along Luzier Lane to 570 mg/L at DW-7 located in the cluster of homes bisected by Sunset Hills Drive. No obvious patterns in the distribution of sulfate are apparent such that iso-concentration contours can be reliably drawn. For example, the sulfate concentration at DW-47 was 390 mg/L, whereas sulfate concentrations at four wells adjacent to DW-47 ranged from were 79 mg/L to 110 mg/L. Another example is the sulfate concentration at DW-4 was 410 mg/L, whereas sulfate concentrations of the five wells nearest DW-4 ranged from 29 mg/L (DW-113) to 210 mg/L (DW-162). Some general patterns that can be discerned include:

- The lower concentrations of sulfate (arbitrarily less than 100 mg/L) were detected in wells just north of the Site along Luzier Lane, in the southern-most wells of the cluster of homes bisected by Sunset Hills Drive, in wells sampled the furthest north of the Site north of Campbell Lane, and most wells located near U.S. Highway 95A.
- The higher concentrations of sulfate (arbitrarily greater than 200 mg/L) were detected in most of the wells (about 75 to 80 percent (%)) in the cluster of homes bisected by Sunset Hills Drive, and less than half of the wells at residences located west of the Site along Locust Drive and on streets further west.

As indicated on Figure 3-2, the concentrations of uranium ranged from 4.3 micrograms per liter (µg/L) at DW-151 located just under a mile north of the Site to 82 µg/L at DW-69 which is located about 3.7 miles north of the Site. As with sulfate, no obvious patterns in the distribution of uranium are apparent such that iso-concentration contours can be reliably drawn. Some general patterns that can be discerned include:

- The lower concentrations of uranium (arbitrarily less than 25 µg/L to equal the Bottled Water Program criteria described in more detail later in this section) were detected in four out of the six wells just north of the Site along Luzier Lane; in the southern-most wells of the cluster of homes bisected by Sunset Hills Drive; in about 60 to 65% of the wells in the cluster of homes bisected by Sunset Hills Drive; and in over 75% of wells at residences located south of Luzier Lane, west of the Site along Locust Drive, and on streets further west.
- The higher concentrations of uranium (arbitrarily greater than or equal to 25 µg/L) were detected in about 35 to 40% of the wells in the cluster of homes bisected by Sunset Hills Drive; just under 25% of the wells at residences located south of Luzier Lane, west of the Site along Locust Drive, and on streets further west; in four out of the six wells located northeast of the Site along U.S. Highway 95A, south of Campbell Lane; and in three out of the seven wells located furthest north of the Site north of Campbell Lane.

During the 1Q 2010 sampling event, exceedances of the EPA Primary Maximum Contaminant Levels (MCLs) established for drinking water were for arsenic (MCL of 0.01 mg/L) in 73 wells, gross alpha (MCL of 15 picocuries per liter (pCi/L)) in 69 wells, nitrate (MCL of 10 mg/L) in two wells, and uranium (MCL of 0.03 mg/L) in 39 wells sampled. The action level for lead of 0.015 mg/L in drinking water was exceeded in one well. Where the respective MCL was met or exceeded, the arsenic concentrations ranged from 0.01 to 0.066 mg/L, the gross alpha concentrations ranged from 15.1 to 53.8 pCi/L, the nitrate concentration was 13 mg/L in both wells, and uranium concentrations ranged from 0.03 to 0.082 mg/L. The lead concentration in the one well was 0.022 mg/L. The exceedances of the MCLs for arsenic, gross alpha, nitrate, and uranium, and the action level for lead are summarized in Table 3-1.

Also included in Table 3-1 is whether the owner/user of the domestic well sampled during the 1Q 2010 sampling event was on the distribution list to receive bottled water from ARC up through the end of 1Q 2010. Wells <u>not</u> sampled in 1Q 2010 but who currently receive bottled water, residences who previously elected not to participate in the program, or residences added to the program based on 1Q 2010 sampling results are <u>not</u> included in Table 3-1.

ARC initially implemented the Bottled Water Program in March 2004. At that time, ARC offered bottled water to any resident north of the Site that requested participation in the program. Starting in April 2004, eligibility criteria for participation in the Bottled Water Program were initiated by ARC. A well owner/user was qualified to receive bottled drinking water from ARC provided that the domestic well supplied drinking water, the uranium concentration during at least one historical sampling event of the well was 0.025 mg/L or greater, and the well owner agreed to participate in the program.

The owner(s)/user(s) of some domestic wells currently may be receiving bottled water under the program although historical uranium concentrations in the specific well have not exceeded 0.025 mg/L. The owner(s)/user(s) of these wells receive bottled water because when the program was initially implemented in March 2004, a minimum uranium value had not been established and ARC offered bottled water to any resident north of the Site that requested participation in the program. ARC did not remove these residences from the program once the minimum uranium concentration of 0.025 mg/L was established in April 2004, and these residences were considered to be "grandfathered" into the program. Of the wells listed in Table 3-1, DW-55, DW-64, DW-75, and DW-105 currently are receiving bottled water based on this criterion. DW-22 was inadvertently added to the program in March 2009 although the residence originally was not "grandfathered" into the program nor has the uranium concentration during sampling events in 2004 exceeded the 0.025 mg/L criterion. Originally, DW-78 was "grandfathered" into the program in 2004 but the uranium concentration during sampling in June 2009 met the 0.025 mg/L criterion.

The 1Q 2010 sampling data in Appendix D-1 were reviewed to evaluate whether domestic wells ineligible for participation in the Bottled Water Program before the event, may be eligible based on a concentration of uranium greater than or equal to 0.025 mg/L. As indicated in Table 3-1, there were 56 wells sampled during the 1Q 2010 event where the bottled water criteria of 0.025 mg/L for uranium was equaled or exceeded.

Table 3-1 indicates that 56 domestic wells are eligible for participation in the Bottled Water Program, but only 42 wells currently are on the 1Q 2010 bottled water distribution list. Therefore, the owners/users of the following 14 additional wells that do not participate in the Bottled Water Program (as of the end of 1Q 2010) currently are eligible for participation based on 1Q 2010 data: DW-23, DW-71, DW-118, DW-119, DW-148, DW-150, DW-153, DW-154, DW-158, DW-159, DW-162, DW-175, TW-06, and WDW019.

The owners of well DW-71 were receiving bottled water but cancelled their participation in the Bottled Water Program on December 15, 2009, as a new water filtration system was installed and operating at their residence. The owners of wells DW-23, DW-118, and DW-119, respectively, previously were eligible to receive bottled water but each declined participation in the Bottled Water Program in August 2008. Well TW-06 is used for non-drinking water purposes only at the Arrowhead Market, whereas well WDW019 is used for irrigation only by Desert Pearl Farms. Therefore, the owners of the eight remaining wells (DW-148, DW-150, DW-153, DW-154, DW-158, DW-159, DW-162, and DW-175) were notified by ARC in letters dated April 26, 2010 of their eligibility for inclusion in the Bottled Water Program. A letter dated the same day also was sent to the owner of DW-119 to determine whether they would reconsider participation in the program. The owner of DW-23 was contacted by phone on May 10, 2010 during which the owner initially indicated that they still were not interested in receiving bottled water, but before the conversation ended, changed their mind and now will be participating in the program. The owner of well DW-118 previously has indicated not to contact them for reconsideration of participation; therefore a letter was not sent.

As of the date of this report, the owners of the following wells have accepted participation in the Bottled Water Program and are enrolled to receive bottled water provided by ARC: DW-23, DW-154, DW-159, DW-162, and DW-175. The current status (as of report date) of residences previously and/or currently eligible for the Bottled Water Program is summarized in Table 3-2.

Table 3-1. Exceedances of EPA Primary Maximum Contaminant Levels, Domestic Wells, 1Q 2010

Well Name[1]	Domestic Well Group[2]	Arsenic (MCL=0.010 mg/L)[3]	Gross Alpha (MCL=15 pCi/L)[3]	Lead (Action Level= 0.015 mg/L)[3][4]	Nitrate (MCL=10 mg/L)[3]	Uranium (MCL=0.030 mg/L)[3]	Uranium (Bottled Water Eligibility =0.025 mg/L)[5]	On 1Q 2010 Bottled Water Distribution List?
DW-1	Q	0.043	- -	- -	- -	- -	- -	No
DW-2	SA	- -	39.7	- -	- -	0.079	0.079	Yes
DW-3	Q	0.011	- -	- -	- -	- -	- -	No
DW-5	SA	- -	41.7	- -	- -	0.080	0.080	Yes
DW-7	SA	- -	24.1	- -	- -	0.047	0.047	Yes
DW-9	Q	- -	- -	- -	13	- -	- -	No
DW-10	SA	- -	16.6	- -	- -	0.034	0.034	Yes
DW-11	Q	0.013	- -	- -	- -	- -	- -	No
DW-12	Q	0.019	- -	- -	- -	- -	- -	No
DW-14	SA	- -	17.9	- -	- -	- -	0.027	Yes
DW-15	Q	0.018	- -	- -	- -	- -	- -	No
DW-16	SA	- -	24.1	- -	- -	0.042	0.042	Yes
DW-18	Q	- -	- -	- -	13	- -	- -	No
DW-19	SA	- -	16.0	- -	- -	0.030	0.030	Yes
DW-20	Q	0.011	- -	- -	- -	- -	- -	No
DW-21	Q	0.033	- -	- -	- -	- -	- -	No
DW-23	SA	- -	27.0	- -	- -	0.059	0.059	No[6]
DW-24	SA	- -	15.7	- -	- -	- -	- -	Yes
DW-25	SA	- -	- -	- -	- -	- -	0.027	Yes
DW-26	SA	- -	26.2	- -	- -	0.043	0.043	Yes
DW-27	SA	- -	21.8	- -	- -	0.043	0.043	Yes
DW-30	Q	0.010	- -	- -	- -	- -	- -	No
DW-31	Q	0.030	- -	- -	- -	- -	- -	No
DW-32	Q	0.015	- -	- -	- -	- -	- -	No

Table 3-1. Exceedances of EPA Primary Maximum Contaminant Levels, Domestic Wells, 1Q 2010

Well Name[1]	Domestic Well Group[2]	Arsenic (MCL=0.010 mg/L)[3]	Gross Alpha (MCL=15 pCi/L)[3]	Lead (Action Level= 0.015 mg/L)[3][4]	Nitrate (MCL=10 mg/L)[3]	Uranium (MCL=0.030 mg/L)[3]	Uranium (Bottled Water Eligibility =0.025 mg/L)[5]	On 1Q 2010 Bottled Water Distribution List?
DW-34	SA	0.022	22.0	- -	- -	0.034	0.034	Yes
DW-35	Q	0.013	- -	- -	- -	- -	- -	No
DW-36	SA	- -	- -	- -	- -	- -	0.026	Yes
DW-38	SA	0.029	24.0	- -	- -	0.030	0.030	Yes
DW-39	Q	0.035	15.1	- -	- -	- -	- -	No
DW-41	SA	- -	18.3	- -	- -	- -	0.028	Yes
DW-42	Q	0.015	16.0	- -	- -	- -	- -	No
DW-43	SA	- -	29.6	- -	- -	0.045	0.045	Yes
DW-44	SA	- -	30.9	- -	- -	0.057	0.057	Yes
DW-45	SA	- -	23.2	- -	- -	0.038	0.038	Yes
DW-46	SA	- -	24.1	- -	- -	0.038	0.038	Yes
DW-47	Q	0.027	17.7	- -	- -	- -	- -	No
DW-49	Q	0.022	16.2	- -	- -	- -	- -	No[6]
DW-50	SA	0.022	- -	- -	- -	- -	- -	Yes
DW-51	Q	0.012	- -	- -	- -	- -	- -	No
DW-54	SA	0.055	25.3	- -	- -	- -	0.028	Yes
DW-55	SA	0.021	- -	- -	- -	- -	- -	Yes
DW-57	SA	0.021	22.5	- -	- -	0.032	0.032	Yes
DW-59	Q	0.015	- -	- -	- -	- -	- -	No
DW-62	SA	- -	23.7	- -	- -	0.042	0.042	Yes
DW-63	SA	0.018	25.5	- -	- -	0.030	0.030	Yes
DW-64	SA	0.037	17.5	- -	- -	- -	- -	Yes
DW-65	Q	0.029	- -	- -	- -	- -	- -	No
DW-69	SA	- -	47.2	- -	- -	0.082	0.082	Yes
DW-70	SA	0.010	20.8	- -	- -	0.041	0.041	Yes

Table 3-1. Exceedances of EPA Primary Maximum Contaminant Levels, Domestic Wells, 1Q 2010

Well Name[1]	Domestic Well Group[2]	Arsenic (MCL=0.010 mg/L)[3]	Gross Alpha (MCL=15 pCi/L)[3]	Lead (Action Level= 0.015 mg/L)[3][4]	Nitrate (MCL=10 mg/L)[3]	Uranium (MCL=0.030 mg/L)[3]	Uranium (Bottled Water Eligibility =0.025 mg/L)[5]	On 1Q 2010 Bottled Water Distribution List?
DW-71	Q	- -	28.0	- -	- -	- -	0.026	No[7]
DW-72	SA	0.029	28.0	- -	- -	0.041	0.041	Yes
DW-73	Q	0.031	- -	- -	- -	- -	- -	No
DW-74	Q	0.024	- -	- -	- -	- -	- -	No
DW-75	SA	0.028	- -	- -	- -	- -	- -	Yes
DW-77	SA	0.030	15.1	- -	- -	- -	- -	Yes
DW-78	SA	0.050	19.7	- -	- -	- -	- -	Yes
DW-79	SA	- -	19.6	- -	- -	0.034	0.034	Yes
DW-85	SA	- -	32.7	- -	- -	0.045	0.045	Yes
DW-86	SA	- -	28.3	- -	- -	0.071	0.071	Yes
DW-87	SA	0.013	31.4	- -	- -	0.044	0.044	Yes
DW-88	SA	0.016	17.4	- -	- -	- -	- -	Yes
DW-90	SA	- -	41.3	- -	- -	0.068	0.068	Yes
DW-91	Q	0.037	- -	- -	- -	- -	- -	No
DW-92	Q	- -	29.2 J[8]	- -	- -	- -	- -	No
DW-94	SA	- -	15.2	- -	- -	- -	0.025	Yes
DW-95	Q	0.013	- -	- -	- -	- -	- -	No
DW-96	SA	- -	24.1	- -	- -	0.038	0.038	Yes
DW-98	Q	0.025	- -	- -	- -	- -	- -	No
DW-101	Q	0.033	- -	- -	- -	- -	- -	No
DW-102	Q	0.016	17.7	- -	- -	- -	- -	No
DW-103	Q	0.017	- -	- -	- -	- -	- -	No
DW-108	SA	- -	15.4	- -	- -	- -	0.029	Yes
DW-112	SA	- -	25.8	- -	- -	0.049	0.049	Yes
DW-113	Q	0.036	- -	- -	- -	- -	- -	No

Table 3-1. Exceedances of EPA Primary Maximum Contaminant Levels, Domestic Wells, 1Q 2010

Well Name[1]	Domestic Well Group[2]	Arsenic (MCL=0.010 mg/L)[3]	Gross Alpha (MCL=15 pCi/L)[3]	Lead (Action Level= 0.015 mg/L)[3][4]	Nitrate (MCL=10 mg/L)[3]	Uranium (MCL=0.030 mg/L)[3]	Uranium (Bottled Water Eligibility =0.025 mg/L)[5]	On 1Q 2010 Bottled Water Distribution List?
DW-114	Q	0.039	- -	- -	- -	- -	- -	No
DW-116	Q	0.052	- -	- -	- -	- -	- -	No
DW-117	SA	- -	19.6	- -	- -	0.035	0.035	Yes
DW-118	Q	- -	15.7	- -	- -	- -	0.028	No[6]
DW-119	Q	- -	21.3	- -	- -	0.031	0.031	No[6]
DW-123	SA	0.012	29.7	- -	- -	0.039	0.039	Yes
DW-124	Q	0.037	15.5	- -	- -	- -	- -	No
DW-125	SA	0.031	26.4	- -	- -	0.030	0.030	Yes
DW-128	SA	0.018	20.6	- -	- -	- -	- -	Yes
DW-129	SA	0.015	19.6	- -	- -	- -	- -	Yes
DW-130	SA	0.016	- -	- -	- -	- -	- -	Yes
DW-132	Q	0.023	15.7	- -	- -	- -	- -	No
DW-134	SA	0.012	21.5	0.022	- -	0.035	0.035	Yes
DW-135	SA	0.020	46.4	- -	- -	0.058	0.058	Yes
DW-136	SA	0.023	16.0	- -	- -	- -	0.029	Yes
DW-139	SA	0.010	28.6	- -	- -	- -	0.029	Yes
DW-140	Q	0.021	- -	- -	- -	- -	- -	No
DW-142	Q	0.030	- -	- -	- -	- -	- -	No
DW-143	Q	0.028	- -	- -	- -	- -	- -	No
DW-147	Q	0.011	- -	- -	- -	- -	- -	No
DW-148	Q	0.013	24.3	- -	- -	- -	0.025	No
DW-149	Q	0.066	- -	- -	- -	- -	- -	No
DW-150	Q	0.019	53.8	- -	- -	0.077	0.077	No
DW-151	Q	0.016	- -	- -	- -	- -	- -	No
DW-153	Q	- -	18.3	- -	- -	- -	0.029	No

Table 3-1. Exceedances of EPA Primary Maximum Contaminant Levels, Domestic Wells, 1Q 2010

Well Name[1]	Domestic Well Group[2]	Arsenic (MCL=0.010 mg/L)[3]	Gross Alpha (MCL=15 pCi/L)[3]	Lead (Action Level= 0.015 mg/L)[3][4]	Nitrate (MCL=10 mg/L)[3]	Uranium (MCL=0.030 mg/L)[3]	Uranium (Bottled Water Eligibility =0.025 mg/L)[5]	On 1Q 2010 Bottled Water Distribution List?
DW-154	Q	- -	- -	- -	- -	- -	0.026	No
DW-158	Q	0.022	18.7	- -	- -	- -	0.028	No
DW-159	Q	- -	33.5	- -	- -	0.057	0.057	No
DW-162	Q	- -	25.2	- -	- -	0.037	0.037	No
DW-163	Q	0.030	- -	- -	- -	- -	- -	No
DW-164	Q	- -	20.5	- -	- -	- -	- -	No
DW-166	Q	0.011	- -	- -	- -	- -	- -	No
DW-167	Q	0.013	- -	- -	- -	- -	- -	No
DW-169	Q	0.014	- -	- -	- -	- -	- -	No
DW-170	Q	0.018	- -	- -	- -	- -	- -	No
DW-173	Q	0.019	- -	- -	- -	- -	- -	No
DW-175	Q	- -	25.8	- -	- -	0.041	0.041	No
TW-06[9]	Q	- -	18.0	- -	- -	- -	0.029	No
WDW017	Q	0.045	- -	- -	- -	- -	- -	No
WDW018	SA	0.052	19.9	- -	- -	- -	0.027	Yes
WDW019[10]	Q	- -	31.3	- -	- -	0.058	0.058	No
Well 4[11]	SA	0.016	- -	- -	- -	- -	- -	Yes

Notes:

(1) Only wells sampled in 1Q 2010 and where an MCL for at least one analyte and/or the Uranium Bottled Water Concentration were exceeded are listed.

(2) "SA" indicates "Semi-Annual Domestic Group" and "Q" indicates "Quarterly Domestic Group".

(3) Only analytes for which the indicated MCL is exceeded in at least one well are listed. Analyte concentrations are listed only if the respective MCL is met or exceeded. The symbol "- -" indicates that the respective MCL was not met or exceeded.

(4) MCL set at zero; action level is 0.015 mg/L.

(5) Uranium concentrations are listed only if the uranium concentration of 0.025 mg/L for eligibility in Bottled Water Program is met or exceeded. The symbol "- -" indicates that the Bottled Water Concentration was not met or exceeded.

(6) Qualified to receive bottled water but did not respond to August 2008 notification indicating qualification of bottled water delivery or indicated that not interested in participation in the program.

(7) Cancelled participation in the Bottled Water Program on December 15, 2009, as a new water filtration system was installed at residence.

(8) "J" indicates that the concentration is estimated.

(9) Provides non-drinking water to the Arrowhead Market (Yerington Paiute Tribe).

(10) Irrigation well for Desert Pearl Farms.

(11) Provides water supply to residences on Yerington Paiute Tribe property. Currently, bottled water provided to 86 residences supplied by water from this well.

Table 3-2. Current Summary of Bottled Water Program

Well Name	Bottled Water Program ID	Date Eligible for Bottled Water Program	Date Offered Bottled Water	Date Accepted Bottled Water	Date Rejected Bottled Water	Bottled Water Program Comments
DW-2	QR	12/11/2003	3/9/2004	3/9/2004		
DW-4	QR	3/18/2007	9/6/2007	9/6/2007		
DW-5	QR	4/5/2004	5/19/2004	5/19/2004		
DW-7	QR	4/5/2004	6/23/2004	6/23/2004		
DW-10	QR	12/10/2003	8/20/2008	8/20/2008		
DW-13	Q	4/5/2004	5/11/2004	5/11/2004		Status of occupancy unknown
DW-14	QR	4/6/2004	5/11/2004	5/11/2004		
DW-16	QR	4/6/2004	10/7/2008	10/7/2008		
DW-19	QR	6/8/2004	10/8/2004	9/16/2009		Added back to program 9/16/09; no water between July 2008 and 9/16/09
DW-22	R		8/14/2008	3/3/2009		Doesn't qualify, receiving bottled water
DW-23	Q	4/5/2004	5/10/2010	5/10/2010		Rejected in August 2008, accepted on 5/10/2010
DW-24	QR	6/8/2004	7/30/2004	7/30/2004		
DW-25	QR	4/5/2004	5/6/2004	5/6/2004		
DW-26	QR	4/5/2004	5/11/2004	5/11/2004		
DW-27	QR	4/5/2004	6/23/2004	6/23/2004		
DW-29	QR	6/8/2004	8/28/2008	8/28/2008		
DW-34	QR	6/8/2004	7/30/2004	7/30/2004		
DW-36	QR	12/11/2003	2/1/2007	2/1/2007		
DW-38	QR	12/10/2003	2/13/2006	2/13/2006		
DW-41	QR	12/11/2003	7/30/2004	7/30/2004		
DW-43	QR	12/11/2003	3/8/2004	3/8/2004		
DW-44	QR	9/16/2004	12/5/2004	12/5/2004		
DW-45	QR	12/11/2003	3/18/2004	3/18/2004		
DW-46	QR	12/11/2003	3/8/2004	3/8/2004		
DW-48	QR	12/11/2003	3/8/2004	3/8/2004		
DW-49	Q	9/14/2004				Not on bottled water program, status unknown

Table 3-2. Current Summary of Bottled Water Program

Well Name	Bottled Water Program ID	Date Eligible for Bottled Water Program	Date Offered Bottled Water	Date Accepted Bottled Water	Date Rejected Bottled Water	Bottled Water Program Comments
DW-50	QR	6/2/2009	9/6/2007	9/6/2007		Asked for bottled water and added to the program
DW-53	QR	12/7/2004	8/24/2005	8/24/2005		
DW-54	QR	3/8/2004	12/16/2004	12/16/2004		
DW-55	R		12/22/2004	12/22/2004		Doesn't qualify, receiving bottled water, grandfathered into program
DW-57	QR	5/4/2004	12/15/2004	12/15/2004		
DW-58	QR	5/4/2004	9/12/2009	9/12/2009		Rental property
DW-61	QR	4/6/2004	5/6/2004	5/6/2004		
DW-62	QR	3/9/2004	5/11/2004	5/11/2004		
DW-63	QR	12/7/2004	12/16/2004	12/16/2004		
DW-64	R		1/26/2005	1/26/2005		Doesn't qualify, receiving bottled water, grandfathered into program
DW-68	Q	9/13/2004	12/14/2004	12/14/2004		No water received since 2008, current status unknown, unable to contact owner
DW-69	QR	4/6/2004	5/6/2004	5/6/2004		
DW-70	QR	4/5/2004	5/19/2004	5/19/2004		
DW-71	Q	9/14/2004	8/20/2008	8/20/2008	12/15/2009	Owner installed filtration system in December 2009, stopped bottled water delivery
DW-72	QR	4/7/2004	5/11/2004	5/11/2004		
DW-75	R		1/26/2005	1/26/2005		Doesn't qualify, receiving bottled water, grandfathered into program
DW-77	QR	5/4/2004	8/28/2008	8/28/2008	4/20/2010	Owner passed away- not receiving bottled water - stopped 4/20/2010
DW-78	QR	6/16/2009	12/10/2004	12/10/2004		
DW-79	QR	6/7/2004	7/26/2004	7/26/2004		
DW-80	QR	6/7/2004	7/6/2004	7/6/2004		
DW-85	QR	6/8/2004	7/30/2004	7/30/2004		Rental property
DW-86	QR	9/14/2004	7/30/2004	7/30/2004		
DW-87	QR	12/6/2004	3/3/2005	3/3/2005		
DW-88	QR	9/13/2004	12/6/2004	12/6/2004		

Table 3-2. Current Summary of Bottled Water Program

Well Name	Bottled Water Program ID	Date Eligible for Bottled Water Program	Date Offered Bottled Water	Date Accepted Bottled Water	Date Rejected Bottled Water	Bottled Water Program Comments
DW-89	QR	9/13/2004	12/10/2004	12/10/2004		
DW-90	QR	9/14/2004	8/8/2008	8/8/2008		
DW-94	QR	9/13/2004		3/3/2009		Rejected 8/11/2008, requested participation on 3/3/2009
DW-96	QR	9/13/2004	12/14/2004	12/14/2004		
DW-105	R		5/3/2005	5/3/2005		Doesn't qualify, receiving bottled water, grandfathered into program
DW-106	Q	3/7/2005	March 2005		March 2005	March 2005 - not interested
DW-108	QR	3/7/2005	5/3/2006	5/3/2006		
DW-112	QR	6/6/2005	9/2/2008	9/2/2008		
DW-117	QR	6/6/2005	8/24/2005	8/24/2005		
DW-118	Q	6/6/2005	June 2005		June 2005	Confirmed again on 8/12/08 - not interested, asked not to contact again
DW-119	Q	6/6/2005	4/26/2010		8/11/2008	Rejected June 2005 and again on 8/11/2008, resent letter on 4/26/10
DW-121	Q	6/7/2005	3/2/2006		2008	No bottled water received since 2008
DW-123	QR	9/9/2005	3/2/2006	3/2/2006		
DW-125	QR	6/18/2009	9/1/2009	9/1/2009		
DW-127	QR	6/14/2006	12/6/2006	12/6/2006		
DW-128	QR	9/14/2009	1/8/2010	1/8/2010		
DW-129	QR	9/21/2006	11/12/2006	9/4/2009		Restarted in program on 9/4/2009
DW-130	QR	12/12/2006	5/3/2007	5/3/2007		
DW-134	QR	7/15/2008	8/14/2008	8/14/2008		
DW-135	QR	7/15/2008	8/12/2008	8/12/2008		
DW-136	QR	8/21/2008	9/16/2008	9/16/2008		
DW-139	QR	4/10/2009	5/4/2009	9/1/2009		
DW-148	Q	3/22/2010	4/22/2010			No response to qualification letter dated 4/22/2010
DW-150	Q	3/16/2010	4/22/2010			No response to qualification letter dated 4/22/2010
DW-153	Q	3/23/2010	4/22/2010			No response to qualification letter dated 4/22/2010

Table 3-2. Current Summary of Bottled Water Program

Well Name	Bottled Water Program ID	Date Eligible for Bottled Water Program	Date Offered Bottled Water	Date Accepted Bottled Water	Date Rejected Bottled Water	Bottled Water Program Comments
DW-154	QR	4/16/2010	4/22/2010	5/4/2010		
DW-158	Q	3/15/2010	4/26/2010			No response to qualification letter dated 4/26/2010
DW-159	QR	4/16/2010	4/26/2010	5/4/2010		
DW-162	QR	4/23/2010	4/26/2010	5/4/2010		
DW-175	QR	3/16/2010	4/26/2010	5/4/2010		
EDW-01	R	9/8/2004	12/6/2004	12/6/2004		
WDW018	QR	3/8/2004	12/16/2004	12/16/2004		
Well 4	QR	9/15/2004	12/22/2004	12/22/2004		

Notes: Q-qualifies for bottled water program
R-currently receives bottled water

Although EPA Secondary MCLs are non-enforceable water quality standards established only as guidelines for aesthetic considerations in drinking water, the analytical data in Appendix D-1 were compared to secondary MCLs. During the 1Q 2010 sampling event, the secondary MCLs were met or exceeded for aluminum in two wells (0.042 and 0.048 mg/L), chloride in one well (330 mg/L), fluoride in ten wells (2.0 to 3.2 mg/L), iron in 15 wells (0.32 to 15 mg/L), manganese in five wells (0.058 to 0.17 mg/L), pH in one well (8.54 s.u.), sulfate in 52 wells (250 to 570 mg/L), and TDS in 88 wells (500 to 1700 mg/L). The exceedances of the secondary MCLs for these constituents are summarized in Table 3-3.

Table 3-3. Exceedances of EPA Secondary Maximum Contaminant Levels, Domestic Wells, 1Q 2010

Well Name[1]	Domestic Well Group[2]	Aluminum (<0.05 and >2 mg/L)[3]	Chloride (250 mg/L)[3]	Fluoride (2 mg/L)[3]	Iron (0.3 mg/L)[3]	Manganese (0.05 mg/L)[3]	pH (<6.5 and >8.5)[3]	Sulfate (250 mg/L)[3]	Total Dissolved Solids (500 mg/L)[3]
DW-1	Q	- -	- -	- -	- -	- -	8.54 J[4]	- -	- -
DW-2	SA	- -	- -	- -	- -	- -	- -	350 J	900
DW-3	Q	- -	- -	- -	- -	- -	- -	440	1200
DW-4	SA	- -	- -	- -	0.51	- -	- -	410	930
DW-5	SA	- -	- -	- -	- -	- -	- -	310	830
DW-6	Q	- -	- -	- -	- -	- -	- -	- -	550
DW-7	SA	- -	- -	- -	- -	- -	- -	570	1300
DW-9	Q	- -	330	- -	- -	- -	- -	440	1700
DW-10	SA	- -	- -	- -	- -	- -	- -	300	870
DW-11	Q	- -	- -	- -	- -	- -	- -	- -	570
DW-14	SA	- -	- -	- -	- -	- -	- -	- -	550
DW-16	SA	- -	- -	- -	- -	- -	- -	- -	610
DW-18	Q	- -	- -	- -	1.0	- -	- -	260	960
DW-19	SA	- -	- -	- -	- -	- -	- -	270	860
DW-20	Q	- -	- -	- -	- -	- -	- -	250	660
DW-22	SA	- -	- -	- -	- -	- -	- -	340 J	930
DW-23	SA	- -	- -	- -	- -	- -	- -	280 J	830
DW-24	SA	- -	- -	- -	- -	- -	- -	- -	620
DW-25	SA	- -	- -	- -	- -	- -	- -	300 J	700
DW-26	SA	0.048	- -	- -	- -	- -	- -	360	960
DW-27	SA	- -	- -	- -	- -	- -	- -	- -	590
DW-28	Q	- -	- -	- -	- -	- -	- -	- -	590
DW-29	SA	- -	- -	- -	- -	- -	- -	- -	680

Table 3-3. Exceedances of EPA Secondary Maximum Contaminant Levels, Domestic Wells, 1Q 2010

Well Name[1]	Domestic Well Group[2]	Aluminum (<0.05 and >2 mg/L)[3]	Chloride (250 mg/L)[3]	Fluoride (2 mg/L)[3]	Iron (0.3 mg/L)[3]	Manganese (0.05 mg/L)[3]	pH (<6.5 and >8.5)[3]	Sulfate (250 mg/L)[3]	Total Dissolved Solids (500 mg/L)[3]
DW-30	Q	- -	- -	- -	2.9	- -	- -	270 J	800
DW-31	Q	- -	- -	- -	- -	- -	- -	- -	570
DW-34	SA	- -	- -	- -	- -	- -	- -	280 J	760
DW-35	Q	- -	- -	- -	- -	- -	- -	250	700
DW-36	SA	- -	- -	- -	- -	- -	- -	- -	500
DW-37	Q	- -	- -	- -	0.33	- -	- -	- -	- -
DW-38	SA	- -	- -	2.0	- -	- -	- -	- -	730
DW-40	Q	- -	- -	- -	- -	- -	- -	- -	650
DW-41	SA	- -	- -	- -	- -	- -	- -	250 J	770
DW-42	Q	- -	- -	- -	- -	- -	- -	310	940
DW-44	SA	- -	- -	- -	- -	- -	- -	310	790
DW-45	SA	- -	- -	- -	- -	- -	- -	350 J	870
DW-46	SA	- -	- -	- -	- -	- -	- -	330 J	1000
DW-47	Q	- -	- -	- -	- -	- -	- -	390 J	960
DW-49	Q	- -	- -	- -	- -	- -	- -	- -	630
DW-50	SA	- -	- -	- -	2.3	0.095	- -	260 J	710
DW-53	SA	- -	- -	- -	- -	- -	- -	- -	530
DW-54	SA	- -	- -	2.1	- -	- -	- -	- -	- -
DW-58	SA	- -	- -	- -	- -	- -	- -	- -	520
DW-59	Q	- -	- -	- -	4.8	0.16	- -	- -	- -
DW-60	Q	- -	- -	- -	- -	0.17	- -	- -	- -
DW-62	SA	- -	- -	- -	0.34	- -	- -	- -	590
DW-63	SA	- -	- -	- -	- -	- -	- -	280	770
DW-64	SA	- -	- -	2.3	- -	- -	- -	- -	- -

Table 3-3. Exceedances of EPA Secondary Maximum Contaminant Levels, Domestic Wells, 1Q 2010

Well Name[1]	Domestic Well Group[2]	Aluminum (<0.05 and >2 mg/L)[3]	Chloride (250 mg/L)[3]	Fluoride (2 mg/L)[3]	Iron (0.3 mg/L)[3]	Manganese (0.05 mg/L)[3]	pH (<6.5 and >8.5)[3]	Sulfate (250 mg/L)[3]	Total Dissolved Solids (500 mg/L)[3]
DW-65	Q	--	--	--	--	--	--	--	510
DW-66	Q	--	--	--	--	--	--	--	620
DW-70	SA	--	--	--	--	--	--	250	710
DW-71	Q	--	--	--	--	--	--	260	600
DW-72	SA	--	--	2.6	--	--	--	--	550
DW-75	SA	--	--	--	1.3	--	--	--	--
DW-77	SA	--	--	--	--	--	--	--	560
DW-78	SA	--	--	2.3	--	--	--	--	--
DW-85	SA	--	--	--	--	--	--	360 J	950
DW-86	SA	--	--	--	--	--	--	270 J	800
DW-87	SA	--	--	--	--	--	--	280	800
DW-88	SA	--	--	--	--	--	--	290	890
DW-90	SA	--	--	--	--	--	--	--	820
DW-94	SA	--	--	--	--	0.058	--	260	620
DW-95	Q	--	--	--	0.40	--	--	--	630
DW-96	SA	--	--	--	--	--	--	250	690
DW-98	Q	0.042	--	--	0.32	--	--	--	530
DW-104	Q	--	--	--	--	--	--	310	760
DW-106	Q	--	--	--	--	--	--	260	720
DW-107	Q	--	--	--	--	--	--	310	810
DW-110	Q	--	--	--	--	--	--	--	540
DW-112	SA	--	--	--	--	--	--	270 J	750
DW-116	Q	--	--	2.0	--	--	--	--	--
DW-118	Q	--	--	--	--	--	--	--	530

Table 3-3. Exceedances of EPA Secondary Maximum Contaminant Levels, Domestic Wells, 1Q 2010

Well Name[1]	Domestic Well Group[2]	Aluminum (<0.05 and >2 mg/L)[3]	Chloride (250 mg/L)[3]	Fluoride (2 mg/L)[3]	Iron (0.3 mg/L)[3]	Manganese (0.05 mg/L)[3]	pH (<6.5 and >8.5)[3]	Sulfate (250 mg/L)[3]	Total Dissolved Solids (500 mg/L)[3]
DW-122	Q	--	--	--	--	--	--	310 J	750
DW-123	SA	--	--	--	--	--	--	370	910
DW-124	Q	--	--	2.0	--	--	--	--	--
DW-125	SA	--	--	--	--	--	--	280	700
DW-128	SA	--	--	--	--	--	--	300	750
DW-129	SA	--	--	--	--	--	--	--	630
DW-132	Q	--	--	2.0	0.62	--	--	--	510
DW-134	SA	--	--	--	--	--	--	310	670
DW-139	SA	--	--	--	--	--	--	330	740
DW-140	Q	--	--	--	--	--	--	--	580
DW-142	Q	--	--	--	--	--	--	260	700
DW-143	Q	--	--	--	--	--	--	280	820
DW-147	Q	--	--	--	0.34	--	--	380 J	880
DW-148	Q	--	--	--	--	--	--	--	530
DW-149	Q	--	--	3.2	--	--	--	--	--
DW-153	Q	--	--	--	--	--	--	--	560
DW-154	Q	--	--	--	--	--	--	350	1000
DW-158	Q	--	--	--	0.64	--	--	260	790
DW-159	Q	--	--	--	--	--	--	--	660
DW-161	Q	--	--	--	0.46	--	--	--	580
DW-162	Q	--	--	--	--	--	--	250	640
DW-163	Q	--	--	--	--	--	--	--	670
DW-164	Q	--	--	--	--	--	--	260	780
DW-166	Q	--	--	--	--	--	--	250 J	900

Table 3-3. Exceedances of EPA Secondary Maximum Contaminant Levels, Domestic Wells, 1Q 2010

Well Name[1]	Domestic Well Group[2]	Aluminum (<0.05 and >2 mg/L)[3]	Chloride (250 mg/L)[3]	Fluoride (2 mg/L)[3]	Iron (0.3 mg/L)[3]	Manganese (0.05 mg/L)[3]	pH (<6.5 and >8.5)[3]	Sulfate (250 mg/L)[3]	Total Dissolved Solids (500 mg/L)[3]
DW-167	Q	- -	- -	- -	- -	- -	- -	- -	620
DW-169	Q	- -	- -	- -	- -	- -	- -	- -	550
DW-170	Q	- -	- -	- -	- -	- -	- -	- -	560
DW-173	Q	- -	- -	- -	15	0.15	- -	- -	- -
WDW017	Q	- -	- -	2.0	- -	- -	- -	- -	- -
WDW019[5]	Q	- -	- -	- -	- -	- -	- -	280	790

Notes:

(1) Only wells where a secondary MCL for at least one analyte is exceeded are listed.

(2) "SA" indicates "Semi-Annual Domestic Group" and "Q" indicates "Quarterly Domestic Group".

(3) Only analytes for which the indicated secondary MCL is exceeded in at least one well are listed. Analyte concentrations are listed only if the respective secondary MCL is met or exceeded. The symbol "- -" indicates that the respective secondary MCL was not met or exceeded.

(4) "J" indicates that the concentration is estimated.

(5) Irrigation well for Desert Pearl Farms.

SECTION 4.0
QUALITY ASSURANCE/QUALITY CONTROL SUMMARY

A total of 138 normal and 14 field duplicate water matrix samples were collected and analyzed during the 1Q 2010 sampling event. All samples were analyzed for the full list of parameters in Table 2-2.

Overall, the data meets the data quality objectives. No data were rejected. All data is considered usable for the stated purposes. Completeness goals are met for every method and analyte. The primary issue that resulted in data qualification is:

- Holding time violations for pH

Results qualified as estimated should be used with caution.

Table 4-1 provides a summary of the number of samples analyzed by each method and the number of results that were qualified for each method.

Table 4-1. Analytical Completeness by Method

				Number of results				Completeness	
Method	Parameter	Samples Analyzed (N+FD)	Analytes per sample	Total	Rejected	Estimated due to QC deficiencies	Estimated due to >MDL but <PQL	Percent usable	Percent quantitative*
E200.7	ICP Metals	138+14	10	1520	0	22	83	100%	98.6%
E200.8	ICP-MS Metals	138+14	15	2280	0	193	359	100%	91.5%
E300	Anions	138+14	6	912	0	120	98	100%	86.8%
E900.0	Gross Alpha and Beta	138+14	2	304	0	4	5	100%	98.7%
E903.0	Total Alpha Radium (Ra-226)	138+14	1	152	0	27	16	100%	82.2%
E904.0	Radium-228	138+14	1	152	0	13	14	100%	91.4%
SM2320B	Alkalinity (as $CaCO_3$)	138+14	4	608	0	0	0	100%	100%
SM2540C	Total Dissolved Solids	138+14	1	152	0	0	0	100%	100%
SM4500	pH (lab)	138+14	1	152	0	152	0	100%	0%
SM5310B	Total Organic Carbon	138+14	1	152	0	1	1	100%	99.3%

* Notes:
Estimations due solely to results <PQL do not affect the calculated completeness
Calculations do not include any required field or laboratory QC samples, except field duplicates.
N = normal environmental samples FD = field duplicate samples
MDL = method detection limit PQL = practical quantitation limit
ICP = inductively coupled plasma ICP-MS = inductively coupled plasma-mass spectrometry

SECTION 5.0

REFERENCES

Brown and Caldwell, 2009, *Draft Addendum to the Site-Wide Quality Assurance Project Plan, Domestic Well Monitoring Program, Yerington Mine Site.* Prepared for the Atlantic Richfield Company. December 11.

Brown and Caldwell, 2010a, *Addendum to the Site-Wide Quality Assurance Project Plan, Domestic Well Monitoring Plan – Revision 1, Yerington Mine Site, Lyon County, Nevada.* Prepared for the Atlantic Richfield Company. February 12.

Brown and Caldwell, 2010b, *Addendum to the Site-Wide Quality Assurance Project Plan, Domestic Well Monitoring Plan – Revision 2, Yerington Mine Site, Lyon County, Nevada.* Prepared for the Atlantic Richfield Company. March 17.

Brown and Caldwell, 2010c, *2009 Annual Domestic Well Monitoring Report, Yerington Mine Site, Lyon County, Nevada.* Prepared for the Atlantic Richfield Company. January 22.

Environmental Standards, Inc. (ESI) and Brown and Caldwell, 2009, *Quality Assurance Project Plan, Yerington Mine Site, Revision 5*, prepared for the Atlantic Richfield Company. May 20.

EPA, 2007, Administrative Order for the Remedial Investigation and Feasibility Study. In the matter of Anaconda / Yerington Mine Site, Yerington, Lyon County, Nevada. Atlantic Richfield, Respondent. U.S. EPA Region 9, Docket No. 9-2007-0005. Proceeding under Section 106(a) of CERCLA, as amended, 42 USC § 9606(a). Including Attachment A: Scope of Work for the Remedial Investigations / Feasibility Studies Continued Response Action. January.

EPA, 2009, Letter to ARC RE: Domestic Well Monitoring Program. Anaconda/Yerington Mine Site, Nevada. November 9.

EPA, 2010a, Letter to the Atlantic Richfield Company RE: Comments on the 2009 Annual Domestic Well Monitoring Report (January 22, 2010). February 18.

EPA, 2010b, Letter to the Atlantic Richfield Company RE: Comments on the Addendum to the Site-Wide Quality Assurance Project Plan, Domestic Well Monitoring Program – Revision 1, Yerington Mine Site (2/12/2010). March 9.